Table S1: Analysis of covariance (ANCOVA) and test for homogeneity of the linear regression slopes, comparing the individual strains of each ecotype.

Geometric parameter	ANCOVA		Test for homogeneity	
Ecotype A	**F**	***p***	**F**	***p***
DSL	0.52	0.489	0.17	0.691
DSW	0.81	0.391	0.19	0.676
DSA	0.42	0.534	0.19	0.672
CAL	0.04	0.849	0.07	0.797
CAW	0.33	0.581	0.14	0.714
CAA	0.01	0.916	0.05	0.832
Ecotype BC				
DSL	1.45	0.268	2.26	0.176
DSW	0.00	0.972	0.41	0.542
DSA	2.43	0.163	1.45	0.267
CAL	1.68	0.236	2.09	0.192
CAW	0.12	0.742	0.04	0.848
CAA	0.88	0.380	0.32	0.589

Table S2: Linear regression analysis of geometric parameter of the two ecotypes in regard to seawater $pH_{(total)}$.

Geometric parameter	Linear regression	r^2	***n***	***p***
Ecotype A				
DSL	y = -0.30x + 5.67	0.72	12	<0.001
DSW	y = -0.27x + 4.92	0.70	12	<0.001
DSA	y = -1.40x + 18.29	0.71	12	<0.001
CAL	y = -0.15x + 2.92	0.34	12	0.046
CAW	y = -0.19x + 2.63	0.48	12	0.013
CAA	y = -0.38x + 4.55	0.38	12	0.034
Ecotype BC				
DSL	y = -0.31x + 5.83	0.89	10	<0.001
DSW	y = -0.18x + 4.28	0.53	10	0.017
DSA	y = -1.97x + 23.15	0.81	10	<0.001
CAL	y = -0.45x + 5.12	0.69	10	0.003
CAW	y = -0.37x + 3.95	0.83	10	<0.001
CAA	y = -0.85x + 8.04	0.78	10	<0.001

Table S3: Linear regression analysis of coccolith mass estimates in regard to seawater pH$_{(total)}$.

	Linear regression	r^2	n	p
Ecotype A				
Electron Microscopy	y = -0.553 x + 6.392	0.69	12	<0.001
Coulter Multisizer	y = -0.767 x + 8.547	0.85	12	<0.001
Bidirectional Circular Polarization	y = -0.318 x + 4.491	0.71	12	<0.001
Ecotype BC				
Electron Microscopy	y = -0.543 x + 5.944	0.83	10	<0.001
Coulter Multisizer	y = 0.309 x - 0.239	0.14	6	0.463
Bidirectional Circular Polarization	y = -0.922 x + 9.008	0.24	10	0.153